

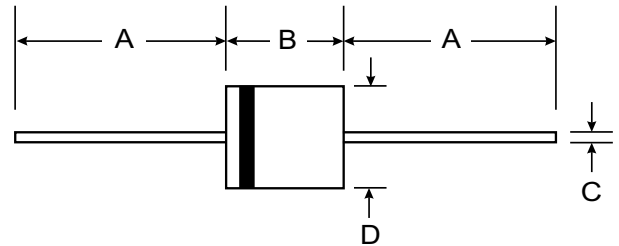
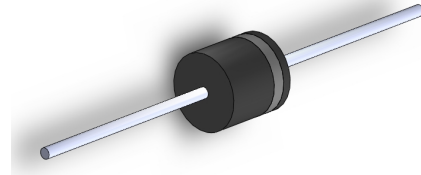
VOLTAGE RANGE: 30 - 100V
CURRENT: 9.0 A

Features

- Metal of silicon rectifier , majority carrier conduction
- Guard ring for transient protection
- Low power loss,high efficiency
- Highcurrent capabilty,lowVF
- High surge capacity
- Plastic package has UL flammability classification 94V-0

Mechanical Data

- Case: JEDEC R-6 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.07 ounces , 2.1 grams
- Mounting position: Any



R-6		
Dim	Min	Max
A	25.4	—
B	8.6	9.1
C	1.2	1.3
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	SYMBOL	90SQ030	90SQ035	90SQ040	90SQ045	90SQ050	90SQ060	90SQ080	90SQ100	UNIT	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	30	35	40	45	50	60	80	100	V	
Maximum RMS Voltage	V _{RMS}	21	24.5	28	31.5	35	42	56	70	V	
Maximum DC Blocking Voltage	V _{DC}	30	35	40	45	50	60	80	100	V	
Maximum Average Forward Rectified Current@T _c =95 °C	I _(AV)	9.0								A	
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load(JEDEC Method)	I _{FSM}	275								A	
Peak Forward Voltage at 9.0ADC(Note1)	V _F	0.55			0.7		0.8			V	
Maximum DC Reverse Current @T _j =25°C at Rated DC Bolcking Voltage @T _j =100°C	I _R	0.5					50				mA
Tycal Junction Capacitance (Note2)	C _J	450									PF
Tycal Thermal Resistance (Note3)	R _{JC}	3.0									°C/w
Operating Temperature Range	T _J	-55 to+150									°C
Storage Temperature Range	T _{STG}	-55 to+150									°C

NOTES:1.300us Pulse Width, 2%Dudy Cycle.
 2.Measured at 1.0 MHZ and applied reverse voltage of 4.0VDC.
 3.Thermal Resistance Junction to Case.

FIG.1-FORWARD CURRENT DERATING CURVE

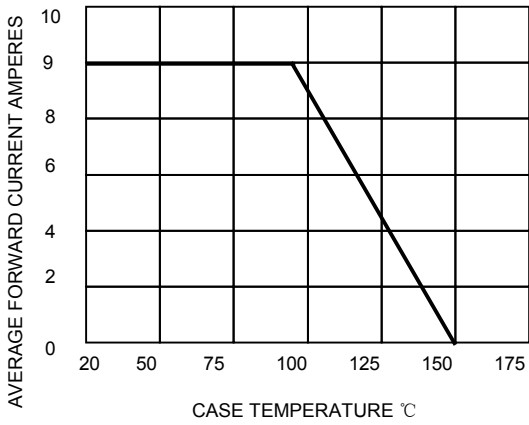


FIG.2-MAXIMUM NON-REPETITIVE SURGE

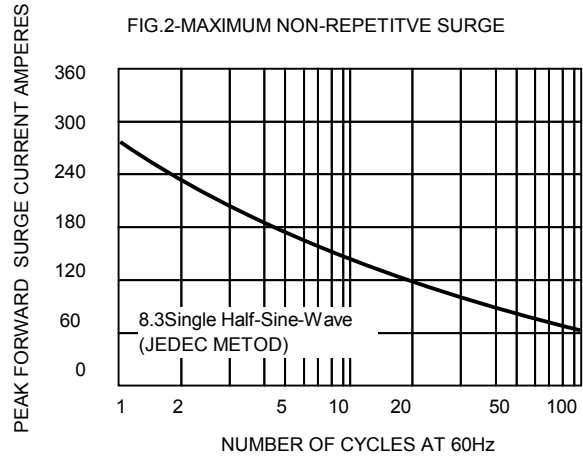


FIG.3-TYPICAL REVERSE CHARACTERISTICS

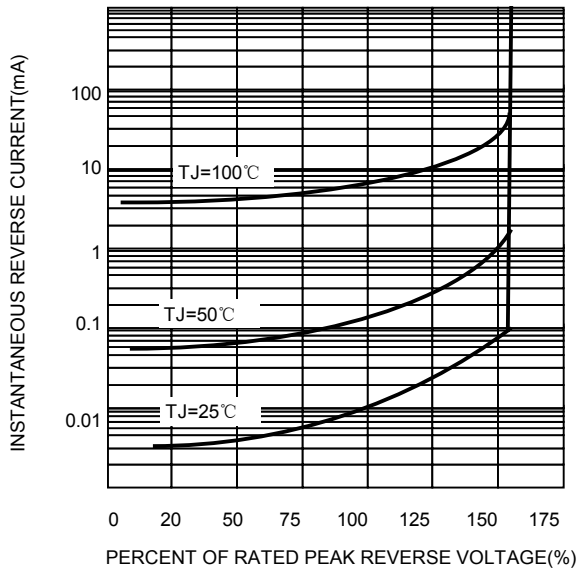


FIG.4-TYPICAL FORWARD CHARACTERISTICS

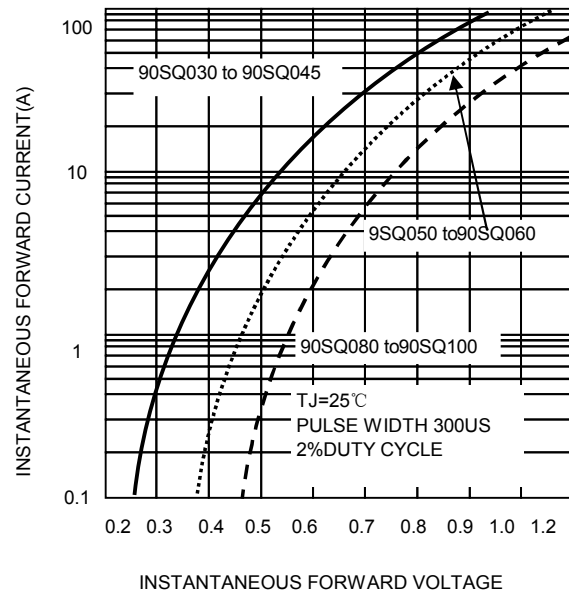


FIG.5-TYPICAL JUNCTION CAPACITANCE

